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BEST AVAILABLE COPY**AMENDMENTS IN THE CLAIMS:**

1. (Currently Amended) A high power laser source for generating a stable exit beam at a given wavelength, said laser source comprising a laser diode and guide means for conducting a laser beam, said laser diode including a reflecting front facet and said guide means including at least one reflector, *wherein*

- said reflector has a reflectivity R_{FBG} , centered at the desired wavelength of said exit beam,
- said front facet has a reflectivity R_{F} towards said guide means,
- said reflectivities R_{FBG} and R_{F} being selected to achieve a predetermined relative feedback

$$r_{\text{FB}} = k * R_{\text{FBG}} / R_{\text{F}} > \{4\} \underline{5},$$

k being a factor determined by the coupling efficiency within said guide means,

- said guide means' length and said at least one reflector's reflectivity R_{FBG} are selected to warrant multimode operation with at least 10 longitudinal Fabry-Perot internal modes, and

- said laser source is uncooled, i.e., has no active cooling element.

2. (Original) The laser source according to claim 1, *wherein*

- the relative feedback r_{FB} is between 5 and 10.

3. (Canceled)

4. (Original) The laser source according to claim 1, *wherein*

- the reflectivity R_{F} of the laser's front facet towards the guide means is less than 10%.

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5. (Original) The laser source according to claim 4, *wherein*
- the reflectivity R_F of the laser's front facet towards the guide means is less than 1%.
6. (Canceled)
7. (Currently Amended) The laser source according to claim [6] 1, *wherein*
- the FWHM reflectivity bandwidth of the reflector corresponds to the equivalent of at least 20 – 40 longitudinal Fabry-Perot internal modes of the laser diode.
8. (Original) The laser source according to claim 1, *wherein*
- the reflector is a grating integrated within the guide means.
9. (Original) The laser source according to claim 8, *wherein*
- the reflector is a fiber Bragg grating within a fiber, the latter forming part of the guide means.
10. (Original) The laser source according to claim 1, *wherein*
- the guide means includes a waveguide consisting of or comprising silicon nitride (Si_3N_4), silica (SiO_2), or silicon (Si).
11. (Original) The laser source according to claim 8, *wherein*
- the grating is an apodized grating.
12. (Original) The laser source according to claim 1, *wherein*
- at least two gratings are provided,
at least one of them integrated within the guide means.

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13. (Original) The laser source according to claim 12, *wherein*
 - at least of the provided gratings is a fiber Bragg grating.
14. (Original) The laser source according to claim 12, *wherein*
 - the two or more gratings have different central wavelengths by design.
15. (Original) The laser source according to claim 12, *wherein*
 - the two or more gratings are similar or identical by design, but have different central wavelengths generated by applying mechanical and/or thermal stress.
16. (Original) The laser source according to claim 8, *wherein*
 - the grating exhibits a non-uniform reflection characteristic resulting in a predetermined filter function.
17. (Original) The laser source according to claim 16, *wherein*
 - the preselected filter function has a flat-top shape.
18. (Original) The laser source according to claim 16, *wherein*
 - the preselected filter function has a linear shape.
19. (Original) The laser source according to claim 16, *wherein*
 - the grating is a chirped grating resulting in a preselected chirped filter function shape.
20. (Original) The laser source according to claim 16, *wherein*
 - the grating is an apodized grating resulting in a filter function shape with suppressed side-band maxima.
21. (Original) The laser source according to claim 12, *wherein*
 - at least one of the gratings is a chirped and apodized grating resulting in a

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preselected chirped filter function shape with suppressed side-band maxima.

22. (Original) The laser source according to claim 1, *wherein*
- an electronic dither is superimposed on an injection current of the laser diode for improving the power stability of the laser exit beam.
23. (Original) The laser source according to claim 1, *wherein*
- the laser is a semiconductor diode laser.
24. (Original) The laser source according to claim 23, *wherein*
- the laser is an InGaAs quantum well diode laser.
25. (Original) The laser source according to claim 1, *wherein*
- the laser guide means comprises a polarization-maintaining or a non-polarization-maintaining optical fiber.
26. (Original) The laser source according to claim 1, *wherein*
- the guide means includes means for directing the laser beam into an optical fiber.
27. (Original) The laser source according to claim 25, *wherein*
- the means for directing the laser beam into the optical fiber includes beam collimating or focusing means attached to or integrated into said optical fiber.
28. (Currently Amended) A method of making a high power laser source with laser diode and laser beam guide means in front of said laser diode, *characterized by comprising the steps of:*

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- manufacturing a front facet on said laser diode with a selected reflectivity R_F towards said guide means,
- manufacturing at least one reflector with a selected reflectivity R_{FBG} ,
- said reflectivities R_{FBG} and R_F being chosen to achieve a predetermined relative feedback

$$r_{FB} = k * R_{FBG} / R_F > [4] 5,$$

wherein k is determined by the coupling efficiency within said guide means, and

- selecting said guide means' length and said at least one reflector's reflectivity R_{FBG} to warrant multimode operation with at least 10 longitudinal Fabry-Perot internal modes.

29. (Original) The method according to claim 28, *whereby*

- the at least one reflector with a selected reflectivity R_{FBG} is manufactured within said laser beam guide means.

30. (Original) The method according to claim 28, *whereby*

- the manufacturing of the reflector is carried out by UV exposure creating said reflector as fiber Bragg grating in an optical fiber constituting part of the laser beam guide means.